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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/220,223	12/23/1998	TOSHIO KOBAYASHI	20389/81866	3786

7590 12/06/2005

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EXAMINER	
COLE, ELIZABETH M	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/220,223	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Elizabeth M. Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/7/05 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, U.S. Patent No. 4,100, 324 in view of Radwanski et al, U.S. Patent No. 4,879,170. Anderson discloses a nonwoven fabric comprising meltblown microfibers and a pulp material. The microfibers have a diameter of 2-6 microns and have a length of about the same as or greater than a staple fiber, which seems to encompass the claimed range. (staple fibers are generally known to have a length of anywhere from 25-180 mm). See col. 2, lines 46-54. The pulp material may have a length of 0.5 –10 mm. See col. 2, lines 55-62. The pulp fibers are microfibers may be present in the claimed proportions. The nonwoven may have a basis weight within the claimed range.

See example IX. The nonwoven is useful as an absorbent wipe. Anderson differs from the claimed invention because Anderson forms the embossed areas via heat bonding which may reduce the absorbency of the fabric at least at the embossed areas. Radwanski et al teaches that nonwoven fabrics may be hydroentangled on a mesh screen, forming wire or apertured plate in order to form embossments or protuberances without changing the properties such as absorbency, etc. of the fabric. See col. 6, line 64 – col. 7, line 17; col. 14, line 4-41; col. 23, lines 29-50. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the embossed pattern by hydroentangling the fabric. One of ordinary skill in the art would have been motivated to employ hydroentangling and a forming fabric rather than a heat embossing process in order to maintain the absorbency of the fabric even in the patterned areas. With regard to the amendment to claim 1 that the synthetic fibers and pulp fibers are "mixed with each other and entangled by subjecting a mixture of said thermoplastic synthetic fibers and said pulp fibers to high velocity water jet streams", while Anderson does not teach hydroentangling, Radwanski clearly teaches that it is advantageous to hydroentangle the fabric in order to form protuberances so as to maintain the absorbency of the entire fabric, rather than forming fused areas by embossing. See 6, line 64- col. 7, line 17; col. 14, lines 4-41. With regard to the limitation that the protuberances are formed by embossing and form non-fused areas, Radwanski teaches forming protuberances and teaches that the fibers within the protuberances are non-fused. Similarly, with regard to the steps of stabilizing the mixture with high pressure water jets before hydroentangling, the instant claims are

drawn to a product, not a process of making. Therefore, the burden is on Applicant to show that the process differences result in an unobvious difference in the product, since if the mixture of Anderson is hydroentangled as taught by Radwanski, the claimed protuberances and non-fused areas will be formed and the web will be both stabilized and entangled by the hydroentangling step. Also, with regard to the stabilizing step, Radwanski teaches that the coform can be passed through the hydroentangling apparatus a number of times to completely entangle the coform. See col. 14, lines 29-32. Therefore, Radwanski teaches the stabilizing step since the first pass equates to the claimed stabilizing step.

4. Applicant's arguments filed 10/7/05 have been fully considered but they are not persuasive. Applicant argues that neither Anderson nor Radwanski teach the initial step of stabilizing. However, as set forth, since Radwanski teaches multiple passes of the coform can be made through the hydroentangling apparatus it appears that Radwanski does teach this step. Further, it is noted that the burden is on Applicant to show that any process differences which may exist result in an unobvious difference in the claimed product. This is also true with regard to Applicant's argument that Radwanski and Anderson do not teach embossing. Since the process of Radwanski forms the protuberances which do not comprise fused fibers, the product produced would be the same, even if Radwanski forms the protuberances differently than Applicant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

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